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AUTHOR Reid, Kerry L.
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ABSTRACT

A study investigated whether the workbooks used in the first grades of the Rahway, New Jersey, public schools provided adequate practice in the skills listed in that school district's reading skills array. The four workbooks analyzed were (1) "Phonics We Use: Book A," (2) "The Phonics Workbook: Book A," (3) "Programmed Reading Activities for Books 1-7," and (4) "New Phonics We Use: Book A." A detailed outline of the skills required in each workbook and the number of examples of each were compared with the reading skills array. The results showed that the "Phonics Workbook" and the "Programmed Reading Activities for Books 1-7" provided the most adequate practice in the skills listed in the skills array (Twenty-nine tables of findings are included.) (FL)

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A COMPARISON OF FOUR WORKBOOKS AND THE RAHWAY PUBLIC SCHOOLS READING SKILLS ARRAY

by

Kerry L. Reid

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Submitted in partial fulfullment of the requirement
for the Master of Arts degree in Education at
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CHAPTER I

INTRODUCTION

STATEMENT OF PROBLEM

Do the workbooks used in the Rahway Public Schools first grades provide adequate practice in the skills listed in the Rahway Public Schools Reading Skills Array?

THE HYPOTHESIS

The workbooks used in the Rahway Public Schools first grades do provide adequate practice in the skills listed in the Rahway Public Schools Reading Skills Array.

SIGNIFICANCE OF THE PROBLEM

This study will attempt to show that the workbooks used in the Rahway Public Schools first grades do provide adequate practice in the skills listed in the Rahway Public Schools Reading Skills Array. The results of this careful analysis of four workbooks from different publishers may aid in decisions as to the most advantageous materials to be utilized for seatwork.

ASSUMPTIONS

That there was a sufficient level of self-motivation to warrant the student's attention to the task at hand.

That the classroom atmosphere was conducive to group and individual independent study.

LIMITATIONS

Class groupings may not be conducive to a totally effective independent atmosphere.

The Reading Skills Array from the Rahway Public Schools was the only criteria on which the reading requirements were based.

DEFINITIONS

Seatwork

This is the independent work assigned with concern for what a child or group needs to learn, practice or use (Durkin, 1978).

Workbooks

Four workbooks were analyzed, the names of which follow.

BUCHANAN, CYNTHIA. Programmed Reading Activities for Books 1-7. New York: McGraw-Hill Book Company, 1974.

ELWELL, MURRAY and KUCIA. Phonics Workbook: Book A. Cleveland: Modern Curriculum Press, 1976. 240 pp.

HALVORSEN, MABEL ET AL. Phonics We Use: Book A. Chicago: Lyons and Carnahan, 1966. 80 pp.

HEILMAN, ARTHUR. The New Phonics We Use: Book A. Chicago: Rand McNally & Company, 1972. 96 pp.

Adequate Practice

For the purpose of this study, adequate practice was defined for each skill. The level was determined for each skill based on a general average of the exercises in other typical workbooks.

CHAPTER II

REVIEW OF RELATED LITERATURE

SEATWORK

In 1976 Rosenshine stated that seatwork has seldom been studied; it has been identified as a pervasive classroom activity. He feels that there should be research conducted on the management of seatwork and related topics, such as, individualization and instructional materials. Yarger conducted such a study in 1978 involving sixteen Primary teachers and sixteen Intermediate teachers. Through classroom observations and interviews with classroom teachers, she determined how reading materials were used during the regularly scheduled time for reading instruction, how teachers planned to use materials and, how these decisions were reached.

Yarger's study in 1978 was designed to answer several questions. The questions of interest in this report were: 1) What materials are available in the classroom to teach reading? 2) What materials are used during seatwork?

Yarger discovered that the materials that were available in all of the classrooms to teach reading in the Intermediate and Primary grades, were textbooks and workbooks. The two materials most commonly used in the Intermediate classroom were the Text (55 per cent) and the Workbook (51 per cent); while in the Primary classrooms the Text (50 per cent) and Others (43 per cent) were the most used. Materials which were recorded under Others included: chalkboard,

filmstrips, math materials, record and book sets, video-tapes, earphones, student papers, maps and reading tests.

In answer to the second question, Yarger showed that the materials used during seatwork were Written, Inductive, Teacher Controlled materials. Yarger's study indicated how the materials were being used to teach reading. Yarger (1978) found that studies have not supplied information concerning how materials are used in terms of time, seatwork or in relation to the type of roles that teachers play while using materials.

McDonald (1976) concluded that students who made the largest gains worked with teachers who used a variety of materials. He felt that it was important to look at how such materials were being used by teachers.

The National Committee for Citizens in Education (1974) found that "students spend 75 per cent of their classroom time and 90 per cent of their homework time using textbooks and related materials." It was, therefore, disheartening to note that there was a limited number of references to the topic of the use of Instructional Materials.

Why a particular assignment was given ought to be explained. This point is stressed because at times children are moved from one task to another with no explanation of why they are being asked to do them (Durkin, 1978).

McGuire completed a study in 1967 to identify program-effectiveness criteria which have contributed to the develop-

ment of reading comprehension. She discovered that a complete phonics program and teacher-made mimeographed materials were the supplementary materials that had a positive effect on reading achievement.

In a statistical analysis of mean scores, the group of schools using teacher-made mimeographed materials predominantly, is shown to be significantly different from the group using phonics workbooks at the .01 level of confidence, and just misses the .05 level when compared with schools using a skills supplement. These supplementary materials showed the closest relationship to achievement in reading comprehension.

Dykstra (1968) found evidence that a writing component is an effective addition to a primary reading program. A program which asked a student to learn to write the graphemic symbol as a means of learning to recognize it was among the more successful programs. He surmised that writing symbols in connection with phonics instruction is helpful in aiding the pupil to learn sound-symbol correspondences. He also asserted that writing irregularly represented words is probably helpful in committing such high frequency structure words to the sight vocabulary.

Over 600 first grade students participated in an experiment conducted in 1973 by Davis to determine the merits of individualized reading. The three group study compared the following: (1) PRIMIR divided day vs. (2) non-PRIMIR divided day vs. (3) control-traditional day. The PRIMIR program was a method of individualizing by using a basal reader as a

skills strand supplemented with paperback books and other reading materials.

The entire program was designed to involve each child in an intensive and continuous reading session with every activity related directly to the reading act. Special prescriptive materials were substituted when needed since workbooks were eliminated except in special cases.

The traditional classes used a basal reader for skills sequencing and practice reading. Most sessions were taught in ability groups followed by assignments in workbooks or with dittoed sheets. The library provided companion reading materials. The reading session lasted from sixty to ninety minutes during the first period of the morning.

The data which Davis collected indicated that the PRIMIR divided day was superior to both of the other approaches with a significant difference at the .05 and in some cases at .01 level. The divided day schedule is a definite factor in reading achievement for first grade, for when non-PRIMIR divided day was compared to the control-traditional day, it was concluded that the non-PRIMIR divided day was significantly superior.

A firm believer in independent assignments, Reese P. Maughan (1972), asserted that more discerning and meaningful learnings come about when the learner, and not the teacher, takes on the responsibility to mark and score for accuracy on the performance. This kind of appraisal of the written performance becomes an effective experience in which sensi-

tivity and feeling-tone rank high.

IN DEFENSE OF WORKBOOKS

According to McCracken (1978), children learn to do workbook exercises and ditto sheets by attempting to do those which have a strong extrinsic motivation and when there has been adequate duress in the preparatory period. At least one such exercise should be done each day.

Canty (1978) acknowledged that workbook exercises requiring school children to complete spaces in sentences and to perform like technical functions have a legitimate use as drill or practice exercises in applying what has been taught. He felt that workbook exercises should not be used as a substitute for written assignments.

Harris and Sipay (1975) stated their opinions about workbooks in their book entitled How To Increase Reading Ability. They felt that the teacher's task in a readiness program can be lightened somewhat by making use of readiness workbooks. Workbooks provide colorful, interesting pictures which can serve as a basis for description, discussion, story-telling, and learning new concepts and vocabulary. Workbooks contain graded series of exercises for making comparisons, noting similarities and differences, and learning to observe in a left-to-right direction. Some workbooks stress visual discrimination of letters and later of words, and auditory discrimination of words and of sounds within words, such as initial consonants and rhyming endings.

Learning to use initial consonant associations and context was more effective with a workbook than without one (Harris and Sipay, 1975). Children who received formal readiness work in kindergarten were better readers at the end of first grade than children who did not have such training.

READABILITY OF WORKBOOKS

If students are having trouble with the basal workbook, Fitzgerald (1979) felt it might be because parts of the workbook have a reading level years above the basal text. At times a third grade reading workbook checked out at a sixth grade level.

"The educational value of using workbooks has been debated for years," (Heilman, 1972), and it is known that "the difficulty level of workbooks is often not carefully controlled," (Karlsen, 1976).

Readability formulas were designed to determine the difficulty level of prose selections and so determine the grade level of the book. Fitzgerald (1979) used Fry's method for predicting readability to obtain means for prose selections in forty-two workbooks at grade levels three to six. Population means for average readability as well as range of readability were obtained. The prose selections in the majority of the workbooks were too difficult for the average student to use independently. He found that students in the lower grades will most likely be challenged to the point of frustration.

Willins (1977) conducted an investigation of effects of variable written directions and formats in third grade reading workbooks. A 3X5 split-plot factorial design was used -- Direction Readability Level (3) X Format Variables (4). Materials were from randomly selected third grade reading workbooks from three leading publishers. Forty-eight third and fourth graders with reading accuracy and comprehension scores of 3.0 grade level or above, were randomly placed in one of three Direction Readability Level Groups.

As the result of Direction Readability Level, (1) Shorter directions produced the highest Response Level and the lowest use of Visual Cues as well as the fewest Direction Errors, (2) Long directions produced the most Direction Errors and the lowest Response Levels, (3) Long directions produced the highest Visual Cue Use, regardless of format, and (4) Comprehension Errors were not affected by changing direction length.

Willins reported that as the result of Format Variables, (1) Format variations produced highly significant effects for Response Levels and Visual Cue Use within each Direction Readability Level, (2) Formats containing an example provided the highest Response Level as well as the highest use of Visual Cues, regardless of direction length, (3) Direction Errors were the highest when the format was disguised and unfamiliar, (4) The Visual Cue Use was the least when the format was disguised, (5) Comprehension Errors were highest when the format was disguised.

In 1979, Wilson compared the 1969 and 1976 Ginn and the 1971 and 1976 Houghton Mifflin first grade basal reading materials. Her purpose was to determine whether the vocabulary in the written directional statements of the workbooks and worksheets was included in the controlled vocabulary of the texts.

The results showed that Ginn included more extra words in the written directional statements of its workbooks than Houghton Mifflin. Both series had more extra words in the written directional statements of their worksheets than of their workbooks. Wilson stated that since workbook pages and worksheets are often assigned for independent work, new words in the written directional statements may inhibit the pupil's achievements of the lesson's objective. The construct of the assignment is questionable if the pupil makes errors because of difficulty with written directional statements.

Wilson felt that first year level materials should be examined to ascertain whether written directional statements can be written with more of the controlled vocabulary and fewer extra words. If teachers were aware of the extra words and instruction was given to ensure that they become a part of the pupil's sight vocabulary, the students would be able to complete the assignments successfully.

EFFECTIVE UTILIZATION OF WORKBOOKS

Wartenberg (1979) lists the factors on which the decision to use or not to use workbooks must be based. First of all, the teacher should be concerned with the relationship of the workbook to the reading program in terms of approach, technique, and content. Next, the teacher's purpose (direct or implied) for using the workbooks should be considered. And, finally, the determination of whether the workbook teaches or tests must be made.

A workbook cannot be the sole material used with slow-maturing children even though specific, well-planned learning experiences can help somewhat. Harris and Sipay (1975) stated that workbooks are useful, but only as a part of a rich and varied program. Evidence suggests that use of a workbook for certain specific readiness objectives may be more efficient than teacher-planned lessons based on the same objectives.

Harris and Sipay (1975) felt that independent workbook material can be quite helpful in remedial and corrective work and in teaching children who seem to need a more systematic phonic procedure than the reader method provides. Care should be taken to carefully monitor a child's success with workbook tasks. If he can complete it successfully, he may have the skill already, if he cannot successfully complete the task, his deficiency must be determined. Opportunities to apply his skills in the actual reading act must be

provided.

Phonics has been shown in many studies to be an important aid in word-identification; there is nothing inherently wrong in the use of phonics workbooks according to a study completed by McGuire in 1967. The results of the study indicate that it is the way that phonics workbooks are used that leads to inadequate results. Phonics is an oral activity in which auditory perception of the phonic element must precede any written decoding or encoding process. A workbook tends to be assigned as seatwork and thus becomes a visual rather than an auditory-visual activity. The use of phonics workbooks alone, outside the context of a complete phonics program, seemed to be a questionable practice.

McGuire's (1967) study is a statement of the outcomes of common policies and practices under normal classroom conditions. It is the story of the achievement of 12,695 fourth-grade pupils in two hundred eighty-five schools - public, parochial and private.

Scores for schools using phonics workbooks were below the average expected for children of equal intelligence (McGuire, 1968). A complete phonics program stresses the development of auditory discrimination and perception by including many listening and speaking activities. The way that phonics workbooks are used may emphasize visual practice whereas the application of phonics depends upon auditory perception and auditory memory.

The message that was conveyed by the findings was that

teachers should stress comprehension in the basic part of the reading program and add a complete phonics program as a supplement, a program that includes the auditory skills. Phonics workbooks alone are no help.

Fitzgerald (1979) has stated that until appropriate adjustments in workbook difficulty can be made by the publishers, teachers need to be informed of the problem. Since there is a large variation of readability levels in workbooks, teachers have an obligation to be aware of the difficulty level of each lesson before allowing students to proceed with daily assignments.

ADAPTATION OF WORKBOOKS

Bruno-Golden and Cutler (1979) felt that a child with a visual/perceptual problem may have trouble paying attention to pages with many different items in small spaces. Some workbooks may not allow for enough practice for a particular task for a child who learns slowly. They suggested that materials in workbocks could be adapted to meet a child's needs by making the tasks more manageable, and by offering more opportunities for practice. Cutting out individual pictures or items and pasting them on cards can alter the perceptual complexity of too many pictures and tasks on one page.

In 1972, Rosenbaum reported that a student writes out his excercises in a workbook and frequently receives minimal feedback on his efforts. The work is corrected and returned after the interest has waned.

Rosenbaum suggested that with an automated workbook, the student keys in his answers on a computer terminal and receives immediate corrective or advisory response tailored to the student's performance characteristics. The automated workbook watches for performance errors in real time, signals to the student when an error is detected, shows him where the error is, and gives him the opportunity to improve his performance, right then and there.

Since exercise books contain insufficient amounts of exercise material, some students never get enough practice to allow them to achieve minimum desirable performance levels. According to Rosenbaum (1972), the automated workbook system adjusts the amount of work required of a student on individual basis. The system allows the amount of practice assigned to a student to vary according to a continuously computed estimate of that student's individual needs.

Another advantage of working with an automated workbook system is that the effort required of a teacher to effectively administer and correct exercises becomes virtually non-existent.

THE COMPLETE PHONICS PROGRAM VS. THE PHONICS WORKBOOK

McGuire (1967) raised the question about the distinction between the complete phonics program as a supplementary activity, and the intensive phonics approach or the use of

phonics workbooks, both of which were shown to have been related to low achievement. She found that phonics as a supplementary activity was usually added to a program which had comprehension as its major goal; whereas, as a basic approach, identification of the word was a goal which preceded the thinking through of the sentence. The psychology of learning had something to offer on the relationship of initial emphasis to final outcome, according to McGuire.

A second distinction was made by McGuire (1967), between the use of workbooks alone and the use of a complete phonics program as a supplementary activity. As was mentioned previously, phonics is an aural-oral activity and the way that phonics workbooks are usually used, they become a visual rather than an auditory-visual activity.

SUMMARY

Since a large percentage of a student's day is spent completing seatwork assignments, it was interesting to note the research about seatwork that had been completed. A conclusion that was drawn from the information was that there were benefits derived from the use of a variety of materials including teacher-made mimeographed materials and phonics workbooks. One of the reasons for this was the value of a writing component in which the student writes the graphemic symbol.

The phonics workbook is a widely used medium for seatwork in a classroom. It was determined that there is a

legitimate use as drill of practice exercises in applying what has been taught. At least one such exercise should be done each day.

One of the drawbacks of the phonics workbooks is the level of readability of the prose selections and the written directional statements. Parts of the workbook have a reading level years above the basal text. Some of the vocabulary used in written directional statements is not included in the controlled vocabulary of the texts.

Due to these limitations in workbooks, teachers have to decide whether or not to use certain workbooks as a part of a rich and varied program. Workbooks can be effectively utilized in remedial and corrective work and for word identification skills. The way that phonics workbooks are used in isolation for independent work leads to inadequate results. Teachers should stress comprehension in the basic part of the reading program and add a complete phonics program as a supplement, a program that includes auditory skills. They should be aware of the difficulty level of each lesson before allowing students to proceed and assist them with directions and extra vocabulary words.

The workbook can be adapted to meet the student's individual needs. One method is to cut out sections and place them on cards for children with perceptual deficiencies. Another is the use of the automated workbook, which is computerized lessons.

A final point was that the phonics workbook should be

used as part of a complete phonics program, since phonics is auditory and the workbook is visual if used solely as a seatwork activity. It should be adapted to use as a visual-auditory approach.

CHAPTER III

DESIGN OF THE STUDY

PROCEDURES USED

In order to determine whether the workbooks used in the Rahway Public Schools first grades provide adequate practice in the skills listed in the Rahway Public Schools Reading Skills Array, a careful analysis of four first grade workbooks from four different publishers was conducted. A detailed outline of the skills required and the number of examples of each was compared with the Reading Skills Array of the Rahway School System.

SOURCES OF DATA

The Rahway Public Schools Reading Skills Array was the basis upon which first grade skills were determined for this study. The level utilized was the Primary Level, encompassing grades one to three. In order to isolate those skills covered in first grade, the skills lists in the Teacher's Manuals for the first grade level of the Sullivan Reading Program were used. These skills were then cross-referenced with the Skills Array.

It was necessary to analyze four typical first grade workbooks to obtain a general average of the exercises offered for each skill on the Reading Skills Array. Once these

had been determined, the four workbooks used in Rahway were analyzed to decide if they met the criteria established for adequate practice in the skills listed in the Skills Array.

METHODS OF GATHERING DATA

The exercises in four typical workbooks were tabulated under headings denoting the specific skill for which the lesson was designed. The results of the tabulations for each workbook were then averaged together to determine the general average of exercises in these workbooks.

Once the averages were determined, the exercises in the four workbooks utilized in the first grades of Rahway were tabulated under headings denoting specific skills for which the lessons were designed. The results of these tabulations for each workbook were then compared with the average of exercises in typical workbooks. From this comparison it was determined whether or not the workbook provided adequate practice in the skills listed in Rahway's Skills Array.

DESCRIPTION OF DATA-GATHERING INSTRUMENTS USED

In order to tabulate the number of exercises in the four typical first grade workbooks, tables were developed. A key was set up whereby each workbook was given a corresponding letter by which it was identified in the table. The tables included the name of the individual skills, the letters which corresponded with the name of the workbooks and the amount of

times that the skill appeared in the workbooks. In each table the number of times the skill appeared in the workbooks were added together and divided by four to arrive at an average.

A skills checklist was constructed including each reading skill that was covered in the first grade requirements of the Rahway Public Schools Reading Skills Array. The number of exercises for each particular skill in each of the workbooks was tabulated. The results of these tabulations were cross-referenced with the averages found in the tables.

If the workbook provided the average criteria established for the reinforcement of each skill, it was considered adequate and the number of items was placed in the column labeled adequate on the checklist. If the workbook provided less than the average criteria established for the reinforcement of each skill, it was considered inadequate and the number of items was placed in the column labeled inadequate on the checklist..

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The first Key and the accompanying Tables I through XXVIII contain the titles of the typical first grade workbooks used to obtain an average of the exercises offered for each skill included in the Rahway Public Schools Reading Skills Array.

KEY I

TYPICAL WORKBOOKS

WORKBOOK TITLES	CORRESPONDING LETTERS
A Duck Is A Duck: Helicopters and Gingerbread	A
Inside and Out	B
May I Come In?	C
Merrill Reading Skilltext Series: Bibs	D

The Rahway Public Schools Reading Skills Array was divided into categories. The first area included in this array, under the heading of Word Recognition, was Phonetic Analysis. In Table I, the amount of times that initial consonants were present in typical workbooks was determined first. The Table lists the skills covered, the tabulations for each of the workbooks and the general averages of the exercises in the four workbooks noted in Key I.

TABLE I

INITIAL CONSONANT EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
m - /m/ as in man	5	-	-	3	2
n - /n/ as in nip	2	-	-	2	1
t - /t/ as in tin	5	-	-	4	2.25
p - /p/ as in pin	3	-	-	4	1.75
s - /s/ as in sit	5	-	-	4	2.25
b - /b/ as in bat	3	-	-	4	1.75
c - /c/ as in cat	3	-	-	4	1.75
f - /f/ as in fan	4	-	1	4	2.25
h - /h/ as in hat	5	-	-	4	2.25
d - /d/ as in dish	2	-	-	5	1.75
g - /g/ as in girl	2	1	-	3	1.5
r - /r/ as in rag	6	-	-	4	2.5

Skills	Workbooks				
	A	B	C	D	Av.
k - /k/ as in kitten	6	-	-	2	2
l - /l/ as in lamp	7	-	-	4	2.75
w - /w/ as in wagon	4	-	-	5	2.25
j - /j/ as in jam	2	-	-	2	1
y - /y/ as in yarn	4	-	-	-	1

Table II contains the amount of times that exercises for final consonants were present in the workbooks.

TABLE II

FINAL CONSONANT EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
m - /m/ as in ham	3	-	-	3	1.5
n - /n/ as in pin	4	-	-	7	2.75
t - /t/ as in pit	2	-	1	8	2.75
p - /p/ as in tap	-	-	-	6	1.5
s - /s/ as in this	2	-	-	3	1.25
s - /z/ as in pans	-	-	-	-	-
b - /b/ as in Tab	-	-	-	-	-
d - /d/ as in glad	5	1	-	6	3
g - /g/ as in bag	2	1	-	3	1.5
v - /v/ as in give	-	-	2	-	0.5

Skills	Workbooks				
	A	B	C	D	Av.
x - /ks/ as in ax	-	-	2	-	0.5
k - /k/ as in sink	-	1	-	4	1.25
l - ll - /l/ as in well	3	-	-	6	2.25
r - /r/ as in star	1	-	-	4	1.25

Table III contains the amount of times that exercises for consonant blends were present in the workbooks.

TABLE III

CONSONANT BLEND EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
bl - as in black	-	-	-	-	-
cl - as in class	-	1	-	-	.25
fl - as in flap	-	-	-	-	-
gl - as in glad	-	1	-	-	.25
sl - as in sled	-	2	-	1	.75
br - as in bring	-	-	-	-	-
cr - as in crack	-	3	-	-	.75
dr - as in drip	-	-	-	-	-
gr - as in grass	-	-	2	-	0.5
pr - as in print	-	3	-	-	.75
tr - as in trip	-	-	2	1	.75

Skills	Workbooks				
	A	B	C	D	Av.
fr - as in fry	-	2	1	-	.75
sk - as in skip	-	3	-	-	.75
sm - as in small	-	2	-	-	0.5
sp - as in spill	-	1	-	-	.25
st - as in stand	-	4	3	1	2
sw - as in swim	-	-	-	-	-
tw - as in twin	-	-	-	-	-

Table IV contains the amount of times that exercises for final consonant blends were present in the workbooks.

TABLE IV

FINAL CONSONANT BLEND EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
_nd - as in hand	-	-	-	-	-
_nk - as in pink	-	1	-	-	.25
_mp - as in lamp	-	-	-	-	-
_nt - as in tent	-	-	-	-	-
_lt - as in salt	-	-	-	-	-
_pt - as in slept	-	-	-	-	-
_st - as in fast	-	2	-	-	0.5
_ft - as in left	-	-	-	-	-

Skills	Workbooks				
	A	B	C	D	Av.
_sk - as in mask	-	-	-	-	-
_lk - as in milk	-	-	-	-	-
_lp - as in help	-	-	-	-	-
_xt - as in next	-	-	-	-	-
_lf - as in shelf	-	-	-	-	-
_ct - as in act	-	-	-	-	-

Table V contains the amount of times that exercises for three letter consonant blends were present in the workbooks.

TABLE V

THREE LETTER CONSONANT BLEND EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
scr - as in scratch	-	-	-	-	-
spl - as in splash	-	-	-	-	-
spr - as in spring	-	-	-	-	-
str - as in string	-	-	-	-	-

Table VI contains the amount of times that exercises for consonant digraphs were present in the workbooks.

TABLE VI

CONSONANT DIGRAPH EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
sh - /š/ as in shoe	-	4	2	1	1.75
ch - /č/ as in chicken	-	4	-	-	1
th - /θ/ as in thin	-	4	2	-	1.5
th - /ð/ as in this	-	2	1	-	.75
wh - /w/ or /hw/ as in which	-	4	2	2	2
ng - /ŋ/ as in sing	-	1	-	-	.25
ck - /k/ as in stick	-	-	-	-	-

Table VII contains the amount of times that exercises for consonant trigraphs were present in the workbooks.

TABLE VII

CONSONANT TRIGRAPH EXERCISES IN

FOUR TYPICAL WORKBOOKS

	A	B	C	D	Av.
tch - as in patch	-	-	-	-	-

Table VIII contains the amount of times that exercises for silent letter combinations were present in the workbooks.

TABLE VIII

SILENT LETTER COMBINATION EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
b - after "m" (bomb)	-	-	-	-	-

Table IX contains the amount of times that exercises for difficult consonants/variant sounds were present in the workbooks.

TABLE IX

DIFFICULT CONSONANTS/VARIANT SOUND EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
s - /s/ as in sat	5	-	-	4	2.25
s - /z/ as in was	-	-	-	-	-

Table X contains the amount of times that exercises for short (unglided) vowels were present in the workbooks.

TABLE X

SHORT (UNGLIDED) VOWEL EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
a - /ae/ as in ant	-	-	7	-	1.75
i - /i/ as in ink	2	-	2	-	1
e - /e/ as in egg	-	-	3	-	.75
u - /ə/ as in us	-	-	-	-	-

Table XI contains the amount of times that exercises for long (glided) vowels were present in the workbooks.

TABLE XI

LONG (GLIDED) VOWEL EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
final e - /iy/ as in she	1	-	-	-	.25

Table XII contains the amount of times that exercises for vowels controlled by r and l were present in the workbooks.

TABLE XII

VOWELS CONTROLLED BY R AND L EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
ir - /ɚr/ as in bird	-	-	-	-	-
er - /ɚr/ as in helper	-	-	-	-	-
ar - /ar/ as in star	-	1	-	-	.25
all - /ɔl/ as in small	-	1	-	-	.25
alk - /ɔk/ as in walk	-	1	-	-	.25

Table XIII contains the amount of times that exercises for vowel digraphs were present in the workbooks.

TABLE XIII

VOWEL DIGRAPH EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
ay - /ey/ as in may	2	3	3	-	2

Table XIV contains the amount of times that exercises for final y as a vowel sound were present in the workbooks.

TABLE XIV

FINAL Y EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
final y - /ay/ as in fly	-	2	1	-	.75

Table XV contains the amount of times that skills lessons on rhyming words were present in the workbooks.

TABLE XV

RHYMING WORD EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
rhyming words	-	-	-	3	.75

Table XVI contains the amount of times that there were exercises in blending sounds together to make words in the workbooks.

TABLE XVI

BLENDING SOUNDS EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
blend sounds to make words	7	26	7	3	10.75

Table XVII commenced the section entitled Structural Analysis under the heading of Word Recognition in the Rahway Public Schools Reading Skills Array. The Table contains the amount of exercises in the workbooks dealing with syllabication.

TABLE XVII

SYLLABICATION EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
verb suffix -ing	-	1	4	-	1.25
The suffix -ed is a separate syllable when preceded by a single d or t.	-	-	2	-	0.5

Table XVIII contains the amount of exercises in the workbooks stressing root words.

TABLE XVIII

ROOT WORD EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
A root word (or base word) is a known word to which a prefix, a suffix, or an inflectional ending is added.	2	-	-	3	1.25
Recognizes root (or base) words.	-	-	-	2	0.5

Table XIX contains the amount of times that exercises for suffixes were present in the workbooks.

TABLE XIX

SUFFIXE EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
er - (a person having to do with) geographer	-	1	-	-	.25
er - (comparative degree when added to adjectives) greater	-	1	-	-	.25

Skills	Workbooks				
	A	B	C	D	Av.
est - (superlative degree when added to adjectives) greatest	-	1	1	-	0.5

Table XX contains the amount of times that exercises for compound words were present in the workbooks.

TABLE XX

COMPOUND WORD EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
Identify the parts of a compound word.	-	1	2	-	.75

Table XXI contains the amount of times that exercises for contractions were present in the workbooks.

TABLE XXI

CONTRACTION EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
I'll	-	1	-	-	.25
I'm	-	1	1	-	0.5

Skills	Workbooks				
	A	B	C	D	Av.
that's	-	-	-	-	-
it's	-	1	-	-	.25
let's	-	1	-	-	.25

Table XXII contains the amount of times that exercises for plural words were present in the workbooks.

TABLE XXII

PLURAL WORD EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
s	2	-	-	-	0.5
es	-	1	1	-	0.5

Table XXIII contains the amount of times that exercises for possessives were present in the workbooks.

TABLE XXIII

POSSESSIVE EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
Singular words form the possessives by adding 's.	-	2	2	-	1

The next area under the heading of Word Recognition in the Reading Skills Array was Context Analysis. Table XXIV contains the amount of times that exercises stressing Context Analysis were present in the workbooks.

TABLE XXIV

CONTEXT ANALYSIS EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
using picture clues	19	6	19	-	11
using the general meaning of the passage	9	17	24	24	18.5
using the explanation of another word within the sentence	-	2	-	-	0.5

Skills	Workbooks				
	A	B	C	D	Av.
using context clues in conjunction with phonetic analysis (The dog j_____ over the fence.)	-	1	-	-	.25
using context clues in conjunction with structural analysis (One who farms is called a _____.)	-	1	-	-	.25

The second category on the Rahway Public Schools Reading Skills Array was Word Meaning. Table XXV contains the amount of times that exercises for synonyms and antonyms were present in the workbooks.

TABLE XXV

SYNONYM AND ANTONYM EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
synonyms	-	-	-	-	-
antonyms	-	1	-	2	.75

The third category on the Skills Array was comprehension. Table XXVI contains the amount of times that exercises were present in the workbooks in which the student had to interpret the single word using specific skills.

TABLE XXVI

WORD INTERPRETATION EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
configuration clues	-	1	1	-	0.5
deriving the meaning from context	19	17	24	24	21
developing an understanding that a word may have many meanings	-	-	1	-	.25
understanding pronoun references	-	-	-	5	1.25

Table XXVII contains the amount of times that exercises were present in the workbooks in which the student was aided in developing specific comprehension skills.

TABLE XXVII

SPECIFIC COMPREHENSION SKILL EXERCISES IN FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
identify the main ideas from pictures	-	2	4	17	5.75
understand sentence and paragraph meaning	10	2	1	-	3.25
understand main ideas in simple realistic story	-	4	2	-	1.5
recall specific detail	7	7	9	9	8
interpret sequence from pictures and print	1	3	2	2	2
make inferences from a picture	3	1	-	8	3
make inferences from a written selection	3	2	6	8	4.75
identify and interpret characters	2	4	-	-	1.5
identify cause and effect	-	-	2	-	0.5
identify comparisons	-	-	1	-	.25
follow simple directions	4	7	2	-	3.25

The fourth category on the Rahway Public Schools Reading Skills Array was Study Skills. Table XXVIII contains the amount of times that exercises on locating information were present in the workbooks.

TABLE XXVIII

LOCATING INFORMATION EXERCISES IN

FOUR TYPICAL WORKBOOKS

Skills	Workbooks				
	A	B	C	D	Av.
phrases	2	-	2	-	1
sentences	13	1	4	2	5
paragraphs	3	9	8	17	9.25

The second Key contains the titles of the workbooks used in the Rahway Public Schools first grades.

KEY II

RAHWAY WORKBOOKS

Workbook Titles	Corresponding Letters
Phonics We Use: Book A	E
Phonics Workbook: Book A	F
Programmed Reading Activities for Books 1-7	G
The New Phonics We Use: Book A	H

The Skills Checklist includes each reading skill that was indicated in the first grade requirements of the Rahway Public Schools Reading Skills Array. The averages computed from the typical first grade workbooks were transferred to the checklist to indicate whether the tabulations for Rahway's workbooks showed adequate or inadequate coverage of the skills. If the number of exercises was considered adequate as judged by the average developed from the previous study in Tables I through XXVIII, it was listed in the A column. If the number of exercises was considered inadequate, it was listed in the I column.

SKILLS CHECKLIST

Skills	Av.	E		F		G		H	
		A	I	A	I	A	I	A	I
I. Word Recognition									
A. Phonetic Analysis									
1. Consonants									
a. The student knows initial consonants.									
m - /m/ as in man	2		8		15		3		10
n - /n/ as in nip	1		6		14		1		9
t - /t/ as in tin	2.25		10		16			2	9
p - /p/ as in pin	1.75		6		14			1	2
s - /s/ as in sit	2.25		8		18		4		8
b - /b/ as in bat	1.75		10		19		2		11

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
c - /c/ as in cat	1.75	14		13			1	10	
f - /f/ as in fan	2.25	12		15			2	9	
h - /h/ as in hat	2.25	9		16		3		9	
d - /d/ as in dish	1.75	7		14		2		10	
g - /g/ as in girl	1.5	7		14			-	7	
r - /r/ as in rag	2.5	6		16		4		9	
k - /k/ as in kitten	2		-	12			1	6	
l - /l/ as in lamp	2.75	7		15			-	10	
w - /w/ as in wagon	2.25	8		12			2	8	
j - /j/ as in jam	1		-	13			-	7	
y - /y/ as in yarn	1		-	4		1		4	
b. The student knows <u>final consonants</u>.									
m - /m/ as in ham	1.5		-	10			1	7	
n - /n/ as in pin	2.75		-	16		4		6	
t - /t/ as in pit	2.75		-	17		4		8	
p - /p/ as in tap	1.5		-	13			-	5	
s - /s/ as in this	1.25		-	6			1	5	
s - /z/ as in pans	-		-	4			-		-
b - /b/ as in Tab	-		-	13		1		5	
d - /d/ as in glad	3		-	10			1	6	
g - /g/ as in bag	1.5		-	14			1	4	
v - /v/ as in give	0.5		-	6			-		-
x - /ks/ as in ax	0.5		-	6		1		2	

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
k - /k/ as in sink	1.25	-		13		-		1	
l - ll - /l/ as in well	2.25	-		6		2		4	
r - /r/ as in star	1.25	-		7		-		2	
c. The student recognizes and sounds <u>consonant blends</u>.									
bl - as in black	-	-		3		2		-	
cl - as in class	.25	-		4		1		-	
fl - as in flap	-	-		4		1		-	
gl - as in glad	.25	-		3		4		-	
sl - as in sled	.75	-		5		2		-	
br - as in bring	-	-		4		4		-	
cr - as in crack	.75	-		3		4		-	
dr - as in drip	-	-		3		3		-	
gr - as in grass	0.5	-		4		3		-	
pr - as in print	.75	-		3		2		-	
tr - as in trip	.75	-		5		6		-	
fr - as in fry	.75	-		4		-		-	
sk - as in skip	.75	-		4		-		-	
sm - as in small	0.5	-		-		-		-	
sp - as in spill	.25	-		4		1		-	
st - as in stand	2	-		3		6		-	
sw - as in swim	-	-		3		1		-	
sn - as in snowman	-	-		3		4		-	

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
tw - as in twin	-	-		-		-		-	
final blends									
_nd - as in hand	-	-		-		2		-	
_nk - as in pink	.25	-		-		1		-	
_mp - as in lamp	-	-		-		1		-	
_nt - as in tent	-	-		-		1		-	
_lt - as in salt	-	-		-			-	-	
_pt - as in slept	-	-		-			-	-	
_st - as in fast	0.5	-		-		1		-	
_ft - as in left	-	-		-			-	-	
_sk - as in mask	-	-		-		1		-	
_lk - as in milk	-	-		-			-	-	
_lp - as in help	-	-		-			-	-	
_xt - as in next	-	-		-		1		-	
_lf - as in shelf	-	-		-			-	-	
_ct - as in act	-	-		-			-	-	
d. The student recognizes and sounds three letter consonant blends									
scr - as in scratch	-	-		-		2		-	
spl - as in splash	-	-		-		1		-	
spr - as in spring	-	-		-			-	-	
str - as in string	-	-		-			-	-	
e. The student recognizes and sounds consonant digraphs.									

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
sh - /š/ as in shoe	1.75		-	5		4			-
ch - /č/ as in chicken	1		-	5		3			-
th - /θ/ as in thin	1.5		-	5		4			-
th - /ð/ as in this	.75		-		-	4			-
wh - /w/ or /hw/ as in which	2		-	5			-		-
ng - /ŋ/ as in sing	.25		-		-	5			-
ck - /k/ as in stick	-		-		-	6		1	
f. The student recognizes and sounds consonant trigraphs.									
tch - as in patch	-		-		-	2			-
g. The student recognizes and sounds silent letter combinations.									
b - after "m" (bomb)	-		-		-		-		-
h. The student recognizes and sounds difficult consonants/variant sounds.									
s - /s/ as in sat	2.25	8		18		4		8	
s - /z/ as in was	-		-		-	4			-

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
2. Vowels									
a. The student knows the short (unglided) vowels.									
a - /ae/ as in ant	1.75		-	22		9		9	
i - /i/ as in ink	1		-	17		9		7	
e - /e/ as in egg	.75		-	15		9		7	
u - /ə/ as in us	-		-	19		3		-	
b. The student knows the long (glided) vowels.									
final e - /iy/ as in she	.25		-	6		-		-	
c. The student recognizes the vowels controlled by r and l.									
ir - /ər/ as in bird	-		-	-		-		-	
er - /ər/ as in helper	-		-	-		5		-	
ar - /ar/ as in star	.25		-	-		4		-	
all - /ɔl/ as in small	.25		-	-		2		-	
alk - /ɔk/ as in walk	.25		-	-		1		-	

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
d. The student recognizes and sounds vowel digraphs.									
ay - /ey/ as in may	2		-		-		1		-
e. The student sounds the final y sound as a vowel sound									
final y - /ay/ as in fly	.75		-		4		1		-
3. The student recognizes rhyming words.	.75		4		11		2		8
4. The student is able to blend sounds to make words.	10.75		-		32		15		18
B. Structural Analysis									
1. Syllabication									
a. The student knows the verb suffix -ing.	1.25		-		2		2		-
b. The student knows the suffix -ed is a separate syllable when preceded by a single d or t.	0.5		-		2		1		-
2. Root Words									
a. The student knows a root word (or base word) is a known word to which a prefix, a suffix, or an inflectional ending is added.	1.25		-		2		5		-

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
b. The student is able to recognize root (or base) words.	0.5	-		2		5		-	
3. Suffixes									
a. The student knows the following suffixes.									
er (a person having to do with) geographer	.25	-		-		5		-	
er (comparative degree when added to adjectives) greater	.25	-		-		-		-	
est (superlative degree when added to adjectives) greatest	0.5	-		-		1		-	
4. Compound Words									
a. The student is able to identify the parts of a compound word.	.75	-		-		1		-	
5. Contractions									
a. The student knows the contractions.									
I'll	.25	-		-		1		-	
I'm	0.5	-		-		1		-	
that's	-	-		-		1		-	
it's	.25	-		-		-		-	
let's	.25	-		-		-		-	

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
6. Plural Words									
a. The student knows that plural words are formed by adding:									
s	0.5	-		-		-		-	
es	0.5	-		-		-		-	
7. Possessives									
a. The student knows that singular words form the possessives by adding 's.	1	-		-		-		-	
C. Context Analysis									
1. The student knows the meaning of a word by using picture clues.	11		1	63		28		20	
2. The student knows the meaning of a word by using the general meaning of the passage.	18.5	-		25		14		-	
3. The student knows the meaning of a word in a sentence by using the explanation of another word within the sentence.	0.5	-		-		7		-	
4. The student uses context clues in conjunction with phonetic analysis. (eg. the dog j____ over the fence.	.25	1		3		7		-	

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
5. The student uses context clues in conjunction with structural analysis. (eg. One who farms is called a _____.)	.25	-		-		2		-	
II. Word Meanings									
While the nomenclature may be introduced at the primary level, it is more essential that the student is able to demonstrate understanding of the following concepts than know specifically the words synonym, antonym, homophone, homograph.									
A. Synonyms									
1. The student is able to identify words that have the same basic meaning, but suggest slightly different things. (fix-jam)	-	-		-		-		-	
B. Antonyms									
1. The student is able to name words that are opposite in meaning. (proud-humble)	2.75	-		-		2		-	
III. Comprehension									
A. The student is able to interpret the single word through:									
1. Configuration clues	0.5	-		-		8		-	

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
2. Deriving the meaning from context.	21	-		25		12		-	
3. Developing an understanding that a word may have many meanings.	.25	-		-		3		-	
4. Understanding pronoun references.	1.25	-		-		5		-	
B. The student is able to identify the main ideas from pictures.	5.75	-		1		21		-	
C. The student is able to understand sentence and paragraph meaning.	3.25	-		2		31		-	
D. The student understands main ideas in simple realistic stories.	1.5	-		-		17		-	
E. The student is able to recall specific detail.	8	-		-		18		-	
F. The student is able to interpret sequence (What happened first, second, third, etc.) from pictures and print.	2	-		-		9		-	
G. The student is able to make inferences from a picture.	3	-		-		11		-	
H. The student is able to make inferences from a written selection.	4.75	-		-		13		-	
I. The student is able to identify and interpret Characters.	1.5	-		-		22		-	

Skills	Av.	Workbooks E A	E I	F A	F I	G A	G I	H A	H I
J. The student is able to identify cause and effect.	0.5	-		-		9		-	
K. The student is able to identify comparisons.	.25	-		-		2		-	
L. The student is able to follow simple directions (two steps).	3.25	-		-		13		-	
IV. Study Skills									
A. The student demonstrates the ability to locate information within:									
1. Phrases	1	-		-		2		-	
2. Sentences	5	-		1		19		-	
3. Paragraphs	9.25	-		-		12		-	

In Table XXIX the results of the workbook analysis were compiled into three categories. The first category contained the amount of times that each workbook had an adequate number of exercises for the skills listed in the Rahway Public Schools Reading Skills Array. The second category was a record of the number of times that exercises were present in each workbook, but the amount of exercises was not sufficient in comparison to the averages obtained from the analysis of four typical first grade workbooks and thus were considered inadequate. The third category pertained to the amount of times that there were not any exercises in the workbook for a specific skill in the Reading Skills Array. This category was subsequently entitled Nil. All of the 134 skills in the Reading Skills Array were examined.

TABLE XXIX

RESULTS OF WORKBOOK ANALYSIS

Workbooks	Categories		
	Adequate	Inadequate	Nil
Phonics We Use: Book A	17	1	116
Phonics Workbook: Book A	69	3	62
Programmed Reading Activities for Books 1-7	88	14	32

Workbooks	Categories		
	Adequate	Inadequate	Nil
The New Phonics We Use: Book A	36	1	97

CHAPTER V

SUMMARY AND CONCLUSIONS

RESTATEMENT OF THE PROBLEM.

Do the workbooks used in the Rahway Public Schools first grades provide adequate practice in the skills listed in the Rahway Public Schools Reading Skills Array?

DESCRIPTION OF PROCEDURES

A careful analysis of four first grade workbooks from four different publishers was conducted. A detailed outline of the skills required and the number of examples of each was compared with the Reading Skills Array of the Rahway School System.

MAJOR FINDINGS

The workbook, Phonics We Use: Book A, published by Lyons and Carnahan, provided adequate practice in:

- initial consonants: m,n,t,p,s,b,c,f,h,d,g,r,l,w
- difficult consonants/ variant sounds: s - /s/ as in sat
- rhyming words
- context analysis: The student knows the meaning of a word by using picture clues.
  The student uses context clues in conjunction with phonetic analysis.

The Phonics Workbook: Book A, published by Modern Curriculum Press, provided adequate practice in:

- initial consonants
- final consonants
- consonant blends: bl, cl, fl, gl, sl, br, cr, dr, gr, pr, tr, fr, sk, sp, st, sw, sn
- consonant digraphs: sh, ch, th - /0/ as in thin, wh
- difficult consonants/ variant sounds: s - /s/ as in sat
- short vowels
- long vowels
- final y sound as a vowel
- rhyming words
- blend sounds to make words
- syllabication
- root words
- context analysis: The student knows the meaning of a word by using picture clues.
  The student knows the meaning of a word by using the general meaning of the passage.
  The student uses context clues in conjunction with phonetic analysis.
- comprehension: Deriving the meaning from context.

Programmed Reading Activities for Books 1-7, published by McGraw Hill Book Company, had adequate coverage of the skills in the Rahway Public Schools Reading Skills Array in these areas:

- initial consonants: m,n,s,b,h,d,r,y
- final consonants: n,t,b,x
- consonant blends: bl, cl, fl, gl, sl, br, cr, dr, gr, pr, tr, sp, st, sw, sn
- final blends: _nd, _nk, _mp, _nt, _st, _sk, _xt
- three letter consonant blends: scr, spl
- consonant digraphs: sh, ch, th - /θ/ as in thin, th - /ð/ as in this, ng, ck
- consonant trigraphs: tch
- difficult consonants/ variant sounds: s - /s/ as in sat, s - /z/ as in was
- short vowels
- vowels controlled by r: er, ar
- vowels controlled by l: all, alk
- final y as a vowel
- rhyming words
- blending sounds to make words
- syllabication rules for suffixes, prefixes and inflectional endings
- suffixes: ing, ed, er, est
- compound words
- contractions: I'll, I'm, that's
- context analysis skills
- comprehension skills
- the ability to locate information within: phrases, sentences and paragraphs.

The New Phonics We Use: Book A, published by Rand McNally and Company provided adequate practice in:

- initial consonants
- final consonants: m,n,t,p,s,b,d,g,x,l,r
- consonant digraphs: ck
- difficult consonants/ variant sounds: s - /s/ as in sat
- short vowels: a - /ae/, i - /i/, e - /e/
- rhyming words
- blend sounds to make words
- context analysis: The student knows the meaning of a word by using picture clues.

There were several skills listed in the Rahway Skills Array for which there were no exercises in any of the workbooks. These skills were:

- consonant blends: tw
- final blends: lt, pt, ft, lk, lp, lf, ct
- three letter consonant blends: spr, str
- silent letter combinations: b - after "m"
- vowels controlled by r: ir
- suffixes: er (comparative degree)
- contractions: it's, let's
- plural words: using s and es
- possessives
- synonyms

CONCLUSIONS

Even though a workbook was considered to have an adequate amount of exercises for a specific skill according to the averages arrived at from the evaluation of four typical workbooks, there are times when this amount may not be enough for a child who learns slowly. There are several skills for which there are little or no exercises in the typical workbooks, thus creating an extremely low average to which the other workbooks were compared. Part of the reason for this may be that the typical workbooks are part of a basal reading series and do not cover a full first grade curriculum. It was difficult to find a workbook which contained a majority of the skills listed on the Reading Skills Array. When this occurred a small amount of exercises in the workbooks used in Rahway was considered adequate, when in actual use, it may be inadequate.

It is concluded that out of the workbooks analyzed, the two workbooks that provide the most adequate practice in the skills listed in the Rahway Public Schools Reading Skills Array are the Modern Curriculum Press Phonics Workbook: Book A, and the McGraw Hill Programmed Reading Activities for Books 1-7. The Lyons and Carnahan Phonics We Use and the Rand McNally New Phonics We Use, would serve as supplemental material to the first two workbooks for extra practice for slow learners in the areas in which there are exercises.

RECOMMENDATIONS FOR FURTHER INVESTIGATION

The Rahway School System should make an attempt to find workbooks which would provide adequate practice in those skills listed in the Rahway Public Schools Reading Skills Array that were not adequately covered in the workbooks that were analyzed or provide supplementary exercise materials developed locally.

This research study attempted to analyze the instructional material available in the workbooks used in Rahway's first grades. To aid in the management of such material in relation to the Reading Skills Array, further research should be conducted as to which would be the most beneficial form of the workbook exercises to be utilized.

Further study could indicate how the workbook exercises are being used by the teachers, since in Rahway, the use of the workbooks is up to the discretion of the teachers.

Other research could be done to find which workbook exercises should be completed independently as seatwork and, which would be more beneficial if completed with a group.

An experimental research study would analyze whether there is an increase in reading level for those children who are assigned workbook exercises as a supplement to the Sullivan Reading Program in comparison with those children who are not assigned workbook exercises.

One could also compare the scores of those children who use the Sullivan Reading Program plus workbook exercises with those children who use the Sullivan Reading Program plus teacher prepared ditto materials.

If workbooks are found to fulfill the needs of the Rahway School District, a study could be completed to cross-reference the Reading Skills Array in combination with the Sullivan Reading Program skills checklist, with the workbook exercises. So doing would aid in the effictive use of the material available.

REFERENCES

BRUNO-GOLDEN, and BARBARA COYNE CUTLER. "Classroom Teaching Aids." Exceptional Parent 9: 28-9 (August 1979).

BUCHANAN, CYNTHIA. Programmed Reading Activities for Books 1-7. New York: McGraw-Hill Book Company, 1974.

CANTY, J.L. "Commentary on Writing and the Use of Workbooks." The Reading Teacher 32: 516-7 (February 1979).

CLYMER, THEODORE and BILLIE PARR. A Duck Is A Duck: Helicopters and Gingerbread. Boston, Mass.: Ginn and

CLYMER, THEODORE and NITA WYATT SUNDBYE. May I Come In? Lexington, Mass.: Ginn and Company, 1976. 95pp.

DAVIS, FLOYD W. The Primir (Primary Individualized Reading) Program. Seattle, Wash.: Seattle School District, 1973. 34 pp.

DURKIN, DOLORES. Teaching Them to Read. Boston: Allyn and Bacon, Inc., 1978.

DYKSTRA, ROBERT. Classroom Implications of the First-Grade Reading Studies. Knoxville, Tenn.: College Reading Association Conference, 1968. 12 pp.

Editorial Review Board. Merrill Reading Skilltext Series-Bibs. Columbus, Ohio: Charles E. Merrill Publishing Company, 1970. 56 pp.

ELWELL, MURRAY and KUCIA. Phonics Workbook: Book A. Cleveland: Modern Curriculum Press, 1976. 240 pp.

FITZGERALD, GISELA G. "Why Kids Can Read the Book But Not the Workbook." Reading Teacher 32: 930-2 (May 1979).

HALVORSEN, MABEL ET AL. Phonics We Use: Book A. Chicago: Lyons and Carnahan, 1966. 80 pp.

HARRIS, ALBERT J. and EDWARD R. SIPAY. How to Increase Reading Ability. New York: David McKay Co., 1975.

HEILMAN, ARTHUR W. Principles and Practices of Teaching Reading. Ohio: Charles E. Merrill, 1972. 215 pp.

HEILMAN, ARTHUR. The New Phonics We Use: Book A. Chicago: Rand McNally and Company, 1972. 96 pp.

REFERENCES

KARLSEN, BJORN. "Reading: Assessment and Diagnosis of Abilities." Reading Foundations and Instructional Strategies. (1976).

MAUGHAN, REESE P. "Learning Through Self-Involvement in the Evaluation of Written Effort." Education 92: 63-8 (April 1972).

McCRACKEN, ROBERT A. "Commentary on Writing and the Use of Workbooks." The Reading Teacher 32: 517-8 (February 1979).

McDONALD, FREDERICK J. "Report on Phase II of the Beginning Teacher Evaluation Study." Journal of Teacher Education XXXII No. 1: 39-42 (Spring 1976).

McGUIRE, MARION L. A State-Wide Study of Reading Programs. A Research Report, Rhode Island State Dept. of Education, Providence, 1967.

McGUIRE, MARION L. Assessment of Reading Programs. Boston, Mass.: International Reading Association Conference, 1968. 11 pp.

National Committee for Citizens in Education. Fits and Misfits: What You Should Know About Your Child's Learning Materials. Columbia: Educational Products Information Exchange. 1974.

ROSENBAUM, PETER. "Toward the Automated Workbook: A New Direction for CAI." Educational Technology 12: 36-8 (May 1972).

RUDDELL, ROBERT B. ET AL. Inside and Out. Boston: Allyn and Bacon, 1978. 157 pp.

ROSENSHINE, BARAK. Notes on 'Successful' Programs in Compensatory Reading Education. Stanford, Calif.: Stanford University, 1975.

WARTENBERG, HERBERT. "Phonic Workbooks." Reading Teacher 35: 480-2 (January 1979).

WILLINS, PATRICIA. "The Effects of Variable Directions and Formats in Reading Workbooks Upon Oral Responses, Visual Cue Use, and Error Scores." Dissertation Abstracts International 38: 7-9 (January through March 1978).

REFERENCES

WILSON, LA VISA CAM. "Comparison of Vocabulary Used in Written Directions." Reading Improvement 16: 106-11 (Summer 1979).

YARGER, GWENDOLYNNE POLK and HAROOTUNIAN, BERJ. Teacher's Use of Classroom Materials. Toronto, Canada: American Educational Research Association, 1978. 18 pp.